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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,922	11/13/2001	Benedetto Vigna	854063.660	8943
500	7590	04/02/2004	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			WONG, KIN C	
701 FIFTH AVE			ART UNIT	
SUITE 6300			PAPER NUMBER	
SEATTLE, WA 98104-7092			2651	

DATE MAILED: 04/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,922

Applicant(s)

VIGNA ET AL

Examiner

K. Wong

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims (1-36) are rejected under 35 U.S.C. 102(b) as being anticipated by Hetzler (5227625).

Regarding claim 1: Hetzler read/write transducer for a hard disk drive (as depicted in figure 6 of Hetzler and see associated descriptions for details), including:

a supporting body (element 609 in figure 6);

a read/write head (element 605 in figure 6) carried by the supporting body (as depicted in figure 6); and

an optically detectable structure (element 610 in figure 6) coupled to the supporting body and structured to cooperate with optical measurement means (as depicted figure 6).

Regarding claim 2: Hetzler teaches that wherein the optically detectable structure comprises a pattern of elements having different optical properties (in col. 8, lines 23-32 of Hetzler).

Regarding claim 3: Hetzler teaches that wherein the optically detectable structure comprises zones that reflect an incident electromagnetic radiation (or laser) alternating

with zones non-reflective to the incident electromagnetic radiation (in col. 8, lines 23-32 of Hetzler).

Regarding claim 4: Hetzler teaches that wherein the optically detectable structure comprises a succession of crests and depressions alternating with one another (or grating or scale) (in col. 8, lines 23-32 of Hetzler).

Regarding claim 5: Hetzler teaches that wherein the optically detectable structure comprises a grating (in col. 8, lines 23-32 of Hetzler).

Regarding claim 6: Hetzler depicts in figure 6 that wherein the optically detectable structure is carried by the supporting body.

Regarding claim 7: Hetzler depicts in figure 6 that wherein the optically detectable structure is integral with the supporting body.

Regarding claim 8: Hetzler depicts in figure 6 that a hard disk drive (element 604) comprising at least one hard disk (606) and means for supporting and positioning (elements 608/609) the read/write transducer (element 605), the supporting body presenting a generally parallelepipedal shape with a bottom face turned towards the hard disk, an upper face coupled to the supporting and positioning means, and four side faces, wherein the optically detectable structure (element 610) is arranged on one of the side faces of the supporting body.

Regarding claims 9-17: method (manufacturing process) claims (9-17) are drawn to the method of using the corresponding apparatus claimed in claims 1-8. Therefore method claims 9-17 correspond to apparatus claims 1-8 and are rejected for the same reasons of anticipation as used above.

Regarding claims 18-23: claims (18-23) have limitations similar to those treated in the above rejections, and are met by the reference as discussed above. Claim 18 however also recites the following limitations of a hard disk drive that are met by the depiction of figure 1 of Hetzler.

Regarding claim 24-30: claims (24-30) have limitations similar to those treated in the above rejections, and are met by the reference as discussed above. Claim 24 however also recites the following limitations of an optical system for measuring the transducer position in a disk drive that are met by the depiction of figure 6 of Hetzler.

Regarding claims 31-34: claims (31-34) have limitations similar to those treated in the above rejections, and are met by the references as discussed above. Claim 31 however also recites the following limitations of a device that are met by element 604 of figure 6 of Hetzler.

Regarding claim 35-36: method claims (35-36) are drawn to the method of using the corresponding apparatus claimed in claims 24-28. Therefore method claims 35-36 correspond to apparatus claims 24-28 and are rejected for the same reasons of anticipation as used above.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Warner (4590527), Yoshikawa (4797866), Taniguchi (5325349), Eguchi et al (5568337), Ishizuka et al (5930066), Hercher (5982494) and Taniguchi (6583948) are cited for optical position detection in a disk drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (703) 305-7772.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Hudspeth can be reached on (703) 308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

 kw

30 Mar 04


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
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